INCH-POUND

MIL-DTL-28754/10D
21 November 2014
SUPERSEDING
MIL-C-28754/10C
13 December 1982

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, MODULAR, CONNECTOR, TYPE IV,
40 PIN, CONTACT TAILS ON 0.050 CENTERS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-C-28754.

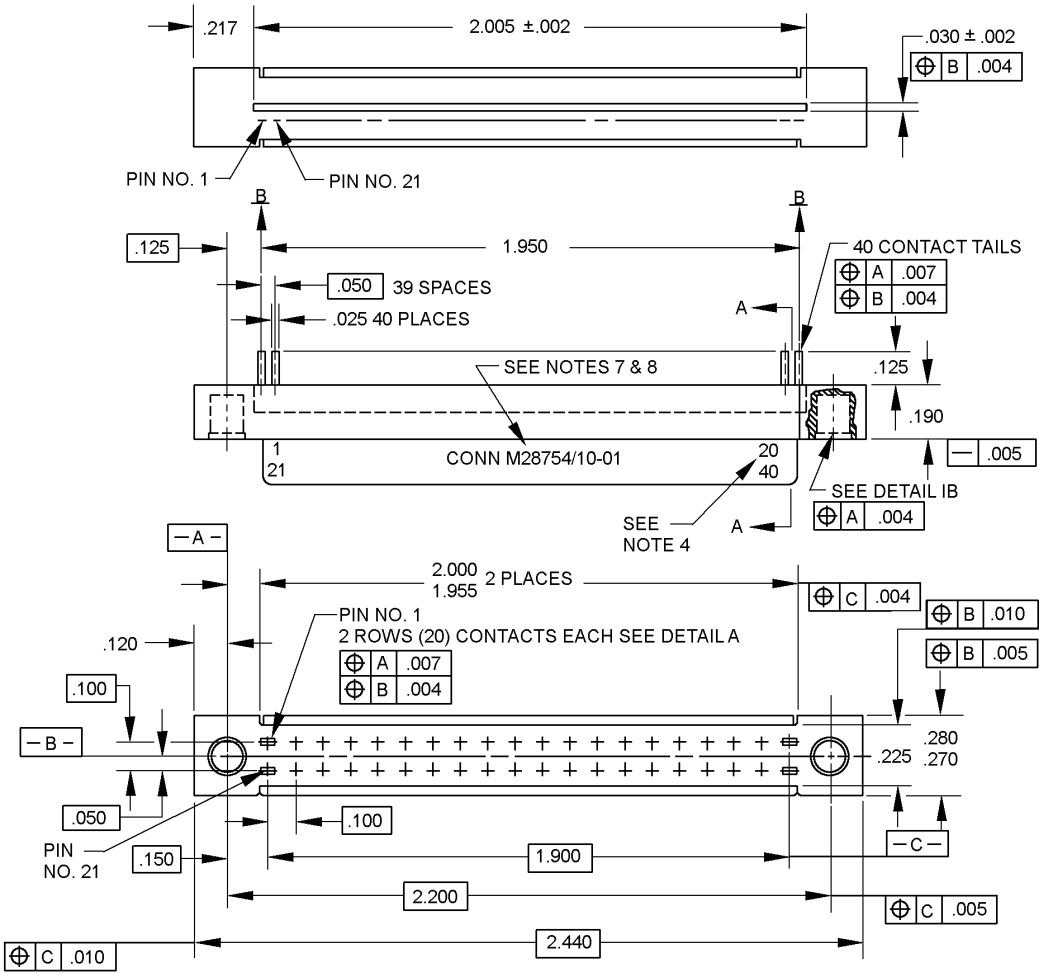


FIGURE 1. Dimensions and configurations (-01 and -030 .

FIGURE 1. Dimensions and configurations (-01 and -03).

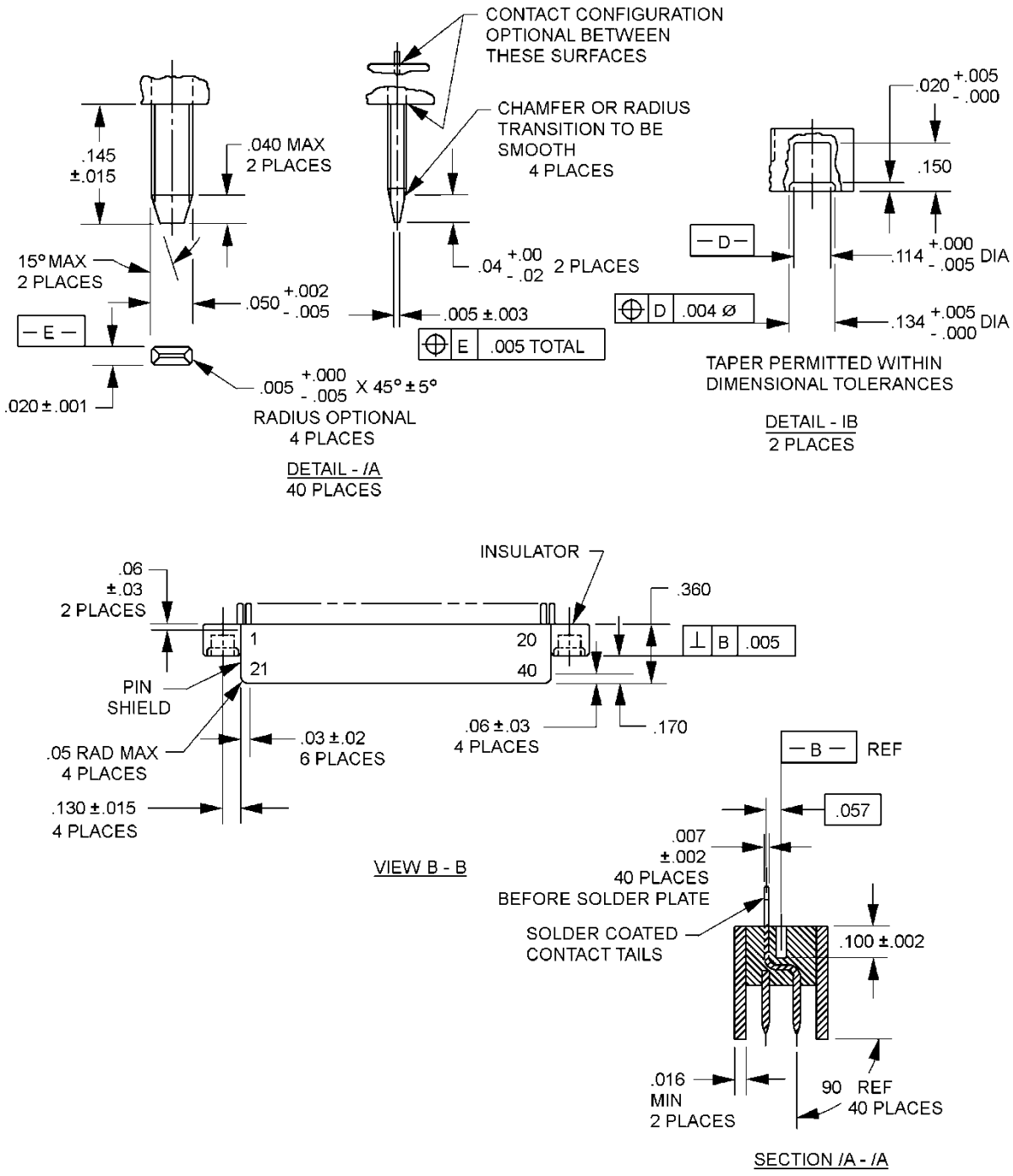


FIGURE 1. Dimensions and configurations – Continued.

| Inches | mm | Inches | mm | Inches | mm |
|---|---|---|---|---|---|
| .000 | .00 | .050 | 1.27 | .225 | 5.72 |
| .001 | .03 | .057 | 1.45 | .270 | 6.86 |
| .002 | .05 | .06 | 1.5 | .275 | 6.98 |
| .003 | .08 | .060 | 1.52 | .280 | 7.11 |
| .004 | .10 | .100 | 2.54 | .285 | 7.24 |
| .005 | .13 | .114 | 2.90 | .360 | 9.14 |
| .007 | .18 | .120 | 3.05 | 1.900 | 48.26 |
| .010 | .25 | .125 | 3.18 | 1.94 | 49.3 |
| .01 | .3 | .134 | 3.40 | 1.950 | 49.53 |
| .015 | .38 | .145 | 3.68 | 1.960 | 49.78 |
| .020 | .51 | .150 | 3.81 | 2.005 | 50.93 |
| .025 | .64 | .170 | 4.32 | 2.200 | 55.88 |
| .030 | .76 | .190 | 4.83 | 2.440 | 61.98 |
| .040 | 1.02 | .217 | 5.51 | | |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± .005 on three place decimals, ± .01 on two place decimals and ± 2° on angles.
4. Contact numbers 1, 20, 21, and 40 shall be marked on pin shield in color contrasting characters .06 inch high.
5. The line referred to as -B- designates a plane passing through the axis of the two (2) .114 +.000-.005 inch diameter keying pin holes.
6. Flash around blade contacts not to exceed .010 inch from the surface of the insulator and shall be firmly attached.
7. Marking this area in color contrasting characters, .06 inch high.
8. The letters CONN are to be marked in white characters, 0.060 inch (1.52 mm) high and are to precede the military Part or Identifying Number (PIN), but are not to be included in the PIN.

FIGURE 1. Dimensions and configurations – Continued.

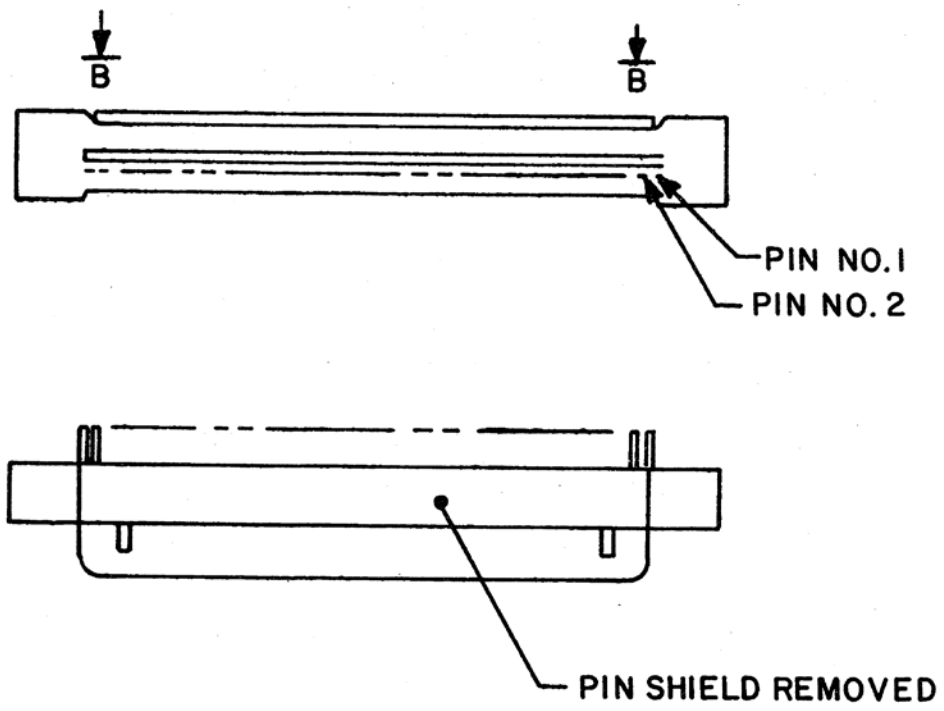


FIGURE 2. Dimensions and configurations (-02 and -04).

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Contacts: See figure 1. Pins shall be brass, half hard, UNS C26000 in accordance with ASTM B36/B36M.

Plating: Contact plating shall be per MIL-C-28754. Solder coated contact tails shall be tinned (see detail AA) with solder to a thickness of 0.0005 inch to 0.003 inch and solder shall cover tails. Solder used shall be in accordance with J-STD-006, type Sn60, form B, no-fluxed. A noncorrosive flux may be used in accordance with J-STD-004, flux designator R0M0 or R0M1.

Pin shields:

Dash numbers 01 and 02: Aluminum alloy 5052, H34, in accordance with SAE-AMS-QQ-A-250/8. Anodized black in accordance with MIL-A-8625, type II, class 2.

Dash numbers 03 and 04 (insulated): Aluminum alloy 5052, H34, in accordance with SAE-AMS-QQ-A-250/8. Anodized black in accordance with MIL-A-8625, type III, class 2.

Alternate material: Unclad E-glass, woven reinforcement material and flame resistant epoxy resin system.

Contact resistance: Voltage drop shall not exceed 20 millivolts.

Solderability: In accordance with MIL-C-28754.

Current rating: 3 amperes.

Temperature rating: -55°C to +105°C.

Voltage rating: 300 volts, ac (rms) at sea level.

Durability: Voltage drop shall not exceed 20 millivolts.

Marking: In accordance with MIL-C-28754, table I and figure 1.

Military part number: M28754/10- (dash number from table I).

TABLE I. Dash numbers and design characteristics.

| Dash no. | Characteristics | Applicable connector assembly |
|---|---|---|
| 01 1/ | Two pin shields | M28754/7-03 |
| 02 1/ | One pin shield | M28754/48-01 |
| 03 | Two pin shields | M28754/7-05 |
| 04 | One pin shield | M28754/48-02 |

1/ -01 and -02 Inactive for new design use -03 and -04.

First article testing: Perform the applicable tests as specified in MIL-C-28754 and the appendix thereto.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Referenced documents. In addition to MIL-C-28754, this document references the following:

MIL-A-8625
ASTM B36/B36M
J-STD-004
J-STD-006
SAE-AMS-QQ-250/8

## CONCLUDING MATERIAL

Custodians:
Army – CR
Navy – AS
Air Force – 85

Preparing activity:
DLA - CC

(Project 5935-2014-062)

Review activities:
Army AR, MI
Navy – MC, YD
Air Force – 99

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